

Fig 1A — 1F

T04200" 60/0460

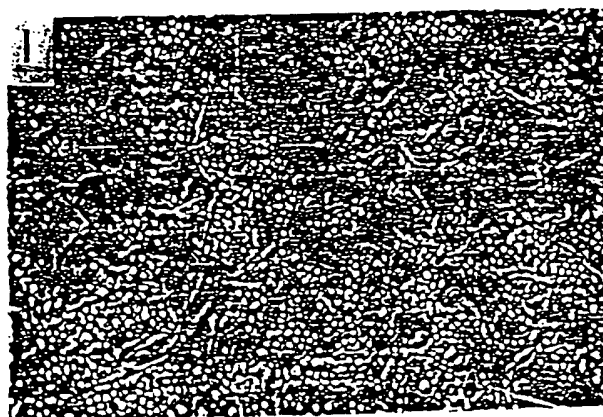
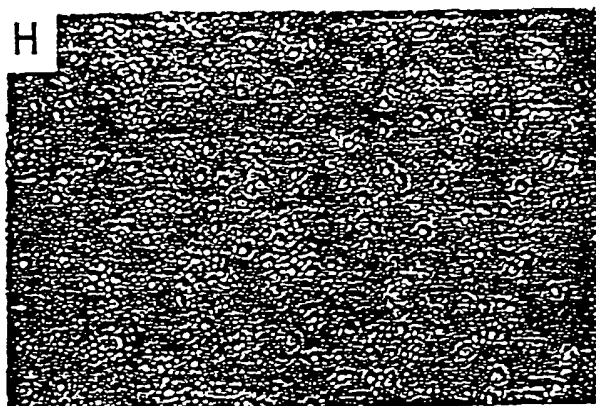
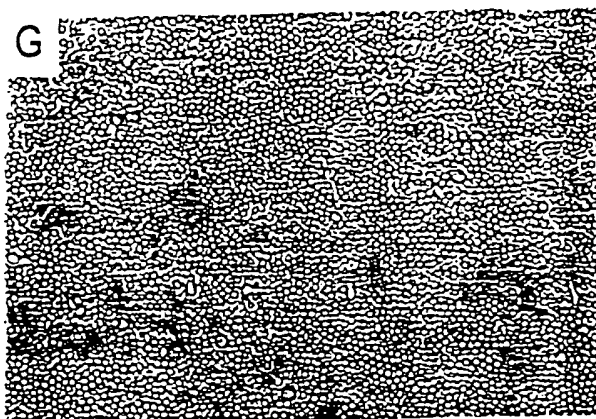


Fig 1G - 1I

09/787097, 062704

1 MVA AAAATEA RLRRRTAATA ALAGRSGGPH CVNGGRCNPG TGQCVCPAGW
 51 VGEQCQHC GG RFRLTGSSGF VTDGPGNYKY KTKCTWLIEG QPNRIMRLRF
 101 NHFATECSWD HLYVYDGDSI YAPLVAAFSG LIVPERDGNE TVPEVVATSG
 151 YALLHFFSDA AYNLTGFNIT YSFD MCPNNC SGRGECKISN SSETVECECS
 201 ENWKGEACDI PHCTDNC GFP HRGICNSSDV RGCSCFSDWQ GPGCSVPVPA
 251 NQSFWTREEY SNLKLPRASH KAVVNGNIMW VVGGYMFNHS DYNMVLAYDL
 301 ASREWLP LNR SVNNVVVRYG HSLALYKDKI YMYGGKIDPT GNVTNELRVF
 351 HIHNESWVLL TPKAKEQYAV VGHSAHIVTL KNGRVVMLVI FGHCPLYGYI
 401 SNVQEYDL DK NTWSILHTQG ALVQGGYGHS SVYDHRTRAL YVHGGYKAFS
 451 ANKYRLADDL YRYD VDTQMW TILKDSRFFR YLHTAVIVSG TMLVFGGNTH
 501 NDTSM SHGAK CFSSDFMAYD IACDRWSVLP RPD LHHDVNR FGHS AVLHNS
 551 TMYVFGGFNS LLLSDILVFT SEQCD AHRSE AACLAAGPGI RCVWNTGSSQ
 601 CISWALATDE QEEKLKSECF SKRTL DHDRC DQHTDCYSCT ANTNDCHWCN
 651 DHCVP RNHSC SEGQISIFRY ENCPKDNPMY YCNKKTSCRS CALDQNCQWE
 701 PRNQECIALP ENICGIGWHL VGNSCLKITT AKENYD NAKL FCRNHNALLA
 751 SLTTQKKVEF VLKQLRIMQS SQMSKLT LT PWVGLRKINV SYWCWEDMSP
 801 FTNSLLQWMP SEPSDAGFCG ILSEPSTRGL KAATCINPLN GSV CERPANH
 851 SAKQCRTPCA LRTACGDCTS GSSECMWCSN MKQCVDSNAY VASFPFGQCM
 901 EWYTMSTCPP ENCSGYCTCS HCLEQPGCGW CTDPSNTGKG KCIEGSYKGP
 951 VKMPSQAPTG NFYPQPLLNS SMCLEDSRYN WSFIHCPACQ CNGH SKCINQ
 1001 SICEKCENLT TGKHCETCIS GFYGDPTNGG KCQPCKCNGH ASLCNTNTGK
 1051 CFCTTKGVKG DECQLCEVEN RYQGNPLRGT CYYTLLIDYQ FTFSLSQEDD
 1101 RYYTAINFVA TPDEQNRDL D MFINASKNFN LNITWAASF S AGTQAGEEMP
 1151 VVSKTNIKEY KDSFSNEKFD FRNHPNITFF VYVSNFTWPI KIQVQTEQ

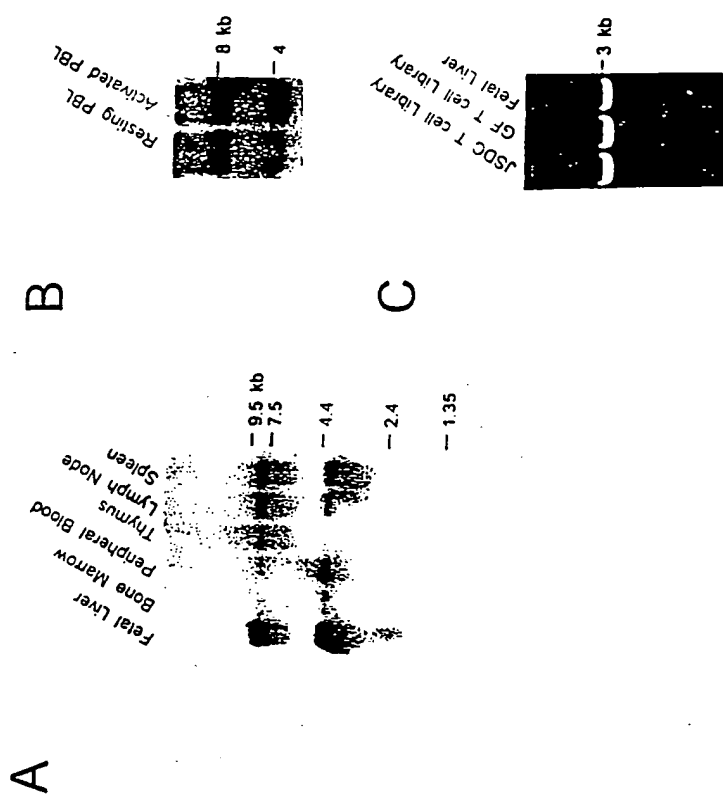


Fig. 3

Kozak sequence
GggAngATGG (5' to 3' N0; 25)

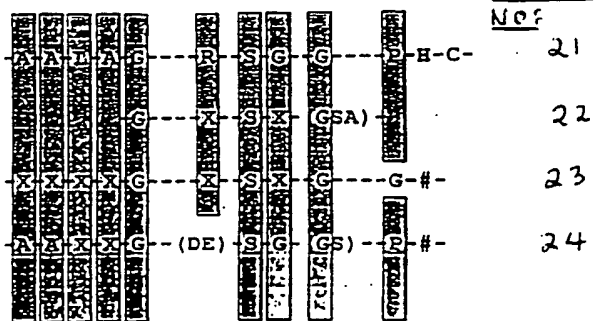


Fig. 4

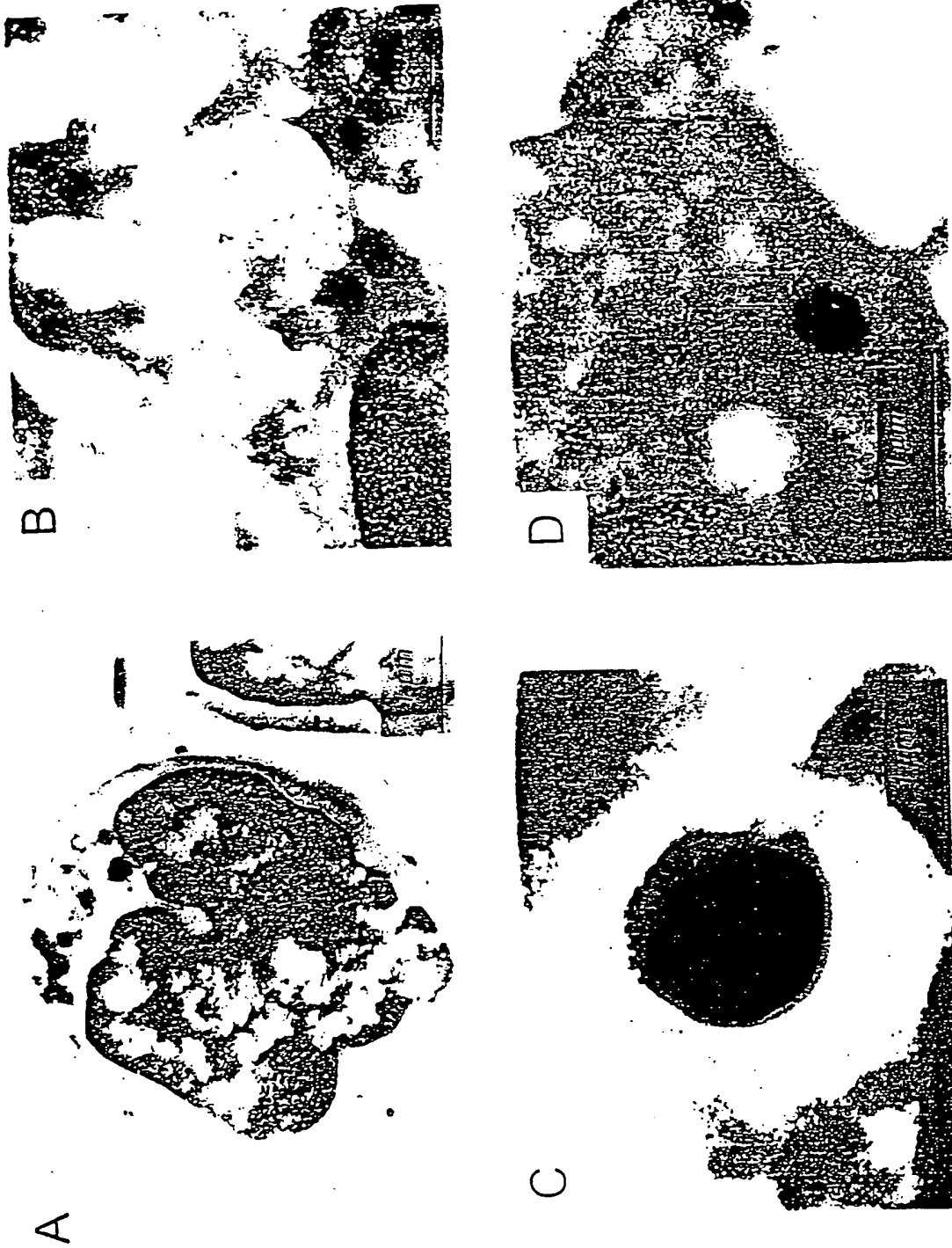


Fig. 5

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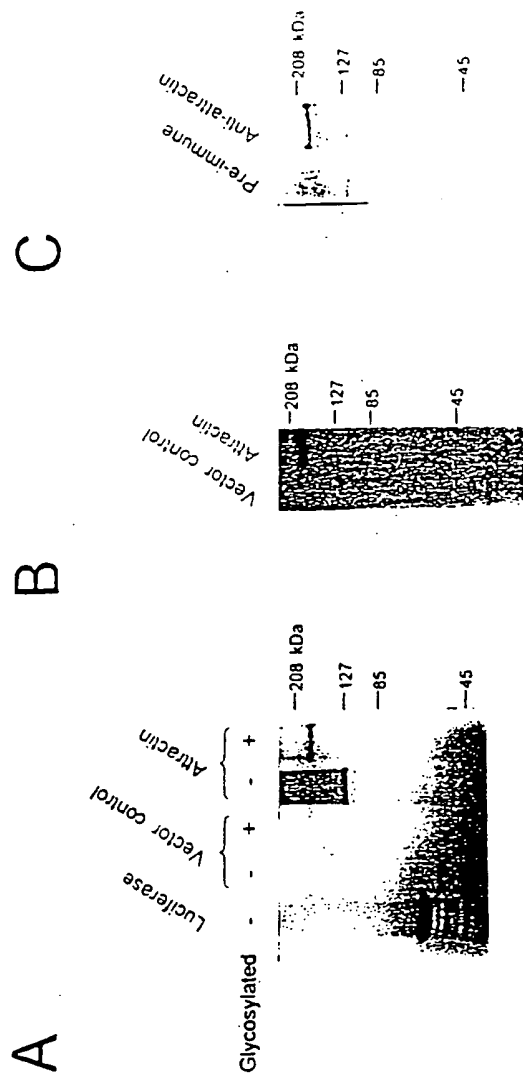


Fig. 6

FIG. 7

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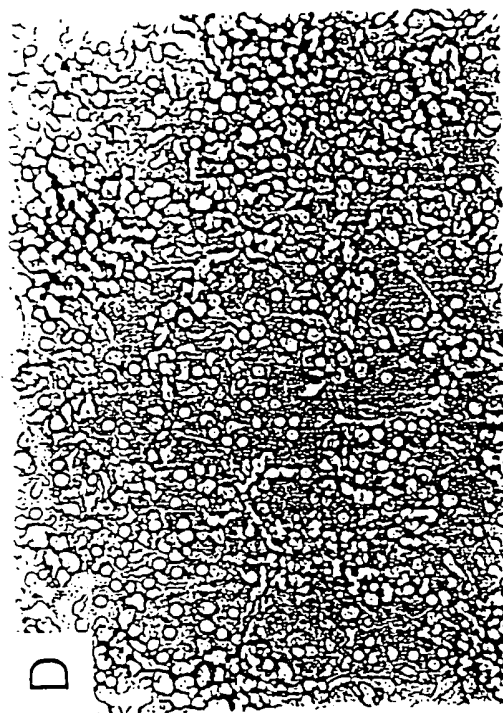
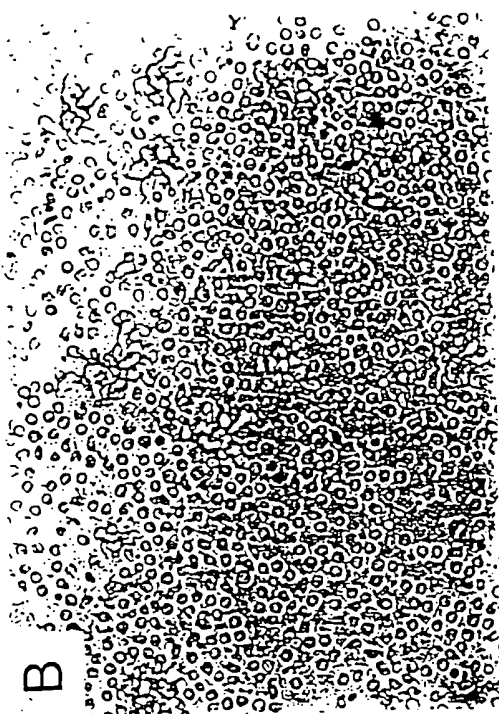


Fig. 7

1 ATGGTGGCCG CAGCGGCGGC AACTGAGGCA AGGCTGAGGA GGAGGACGGC
51 GCGGACGGCA GCGCTCGCGG GCAGGAGCGG CGGGCCGCAC TGTGTCAACG
101 GCGGTCGCTG CAACCCTGGC ACCGGCCAGT GCGTCTGCCC CGCCGGCTGG
151 GTGGGCGAGC AATGCCAGCA CTGCGGGGGC CGCTTCAGAC TAACTGGATC
201 TTCTGGGTTT GTGACAGATG GACCTGGAAA TTATAAATAC AAAACGAAGT
251 GCACGTGGCT CATTGAAGGA CAGCCAAATA GAATAATGAG ACTTCGTTTC
301 AATCATTTTG CTACAGAGTG TAGTTGGGAC CATTTATATG TTTATGATGG
351 GGA CTCAATT TATGCACCGC TAGTTGCTGC ATTTAGTGGC CTCATTGTTC
401 CTGAGAGAGA TGGCAATGAG ACTGTCCCTG AGGTTGTTGC CACATCAGGT
451 TATGCCTTGC TGCATTTTTT TAGTGATGCT GCTTATAATT TGA CTGGATT
501 TAATATTACT TACAGTTTGT ATATGTGTcC AAATAACTGC TCAGGcCGAG
551 GAGAGTGTA GATCAGTAAT AGCAGCGAAA CTGTTGAATG TGAATGTTCT
601 GAAAACTGGA AAGGTGAAGC ATGTGACATT CCTCACTGTA CAGACAACTG
651 TGGTTTTCTC CATCGAGGCA TCTGCAATTC AAGTGATGTC AGAGGATGCT
701 CCTGCTTCTC AGACTGGCAG GGTCTGGAT GTTCAGTTCC TGTACCAGCT
751 AACCAGTCAT TTTGGACTCG AGAGGAATAT TCTAACTTAA AGCTCCCCAG
801 AGCATCTCAT AAAGCTGTGG TCAATGGAAA CATTATGTGG GTTGTGGAG
851 GATATATGTT CAACCACTCA GATTATAACA TGGTTCTAGC GTATGACCTT
901 GCTTCTAGGG AGTGGCTTCC ACTAAACCGT TCTGTGAACA ATGTGGTTGT
951 TAGATATGGT CATTCTTTGG CATTATACAA GGATAAAATT TACATGTATG
1001 GAGGAAAAAT TGATcCAACT GGAATGTGA CCAATGAGTT GAGAGTTTTT
1051 CACATTCATA ATGAGTCATG GGTGTTGTTG ACCCCTAAGG CAAAGGAGCA
1101 GTATGCAGTG GTTGGGCACT CTGCACACAT TGTTACACTG AAGAATGGCC
1151 GAGTGGTCAT GCTGGTCATC TTTGGTCACT GCCCTCTCTA TGGATATATA
1201 AGCAATGTGC AGGAATATGA TTTGGATAAG AACACATGGA GTATATTACA
1251 CACCCAGGGT GCCCTTGTGC AAGGGGGTTA CGGCCATAGC AGTGTTTACG
1301 ACCATAGGAC CAGGGCCCTA TACGTTTATG GTGGCTACAA GGCTTTTCAGT

1351 GCCAATAAGT ACCGGCTTGC AGATGATCTC TACCGATATG ATGTGGATAC
1401 CCAGATGTGG ACCATTCTTA AGGACAGCCG ATTTTCCCGT TACTTGCACA
1451 CAGCTGTGAT AGTGAGTGGA ACCATGCTGG TGT TTGGGGG AAACACACAC
1501 AATGACACAT CTATGAGCCA TGGCGCCAAA TGCTTCTCTT CAGATTTTCAT
1551 GGCCTATGAC ATTGCCTGTG ACCGCTGGTC AGTGCTTCCC AGACCTGATC
1601 TCCACCATGA TGTCAACAGA TTTGGCCATT CAGCAGTCTT ACACAACAGC
1651 ACCATGTATG TGTTCCGTGG TTTCAATAGT CTCCTCCTCA GCGACATCCT
1701 GGTATTCACC TCGGAACAGT GTGATGCGCA TCGGAGTGAA GCCGCTTGTT
1751 TAGCAGCAGG ACCTGGTATT CGGTGTGTGT GGAACACAGG GTCGTCTCAG
1801 TGTATCTCGT GGGCGCTGGC AACTGATGAA CAAGAAGAAA AGTTAAAATC
1851 AGAATGTTTT TCCAAAAGAA CTCTTGACCA TGACAGATGT GACCAGCACA
1901 CAGATTGTTA CAGCTGTACA GCCAACACCA ATGACTGCCA CTGGTGCAAT
1951 GACCATTGTG TCCCCAGGAA CCACAGCTGC TCAGAAGGCC AGATCTCCAT
2001 TTTTAGGTAT GAGAATTGCC CCAAGGATAA CCCcATGTAC TACTGTAACA
2051 AGAAGACCAG CTGCAGGAGC TGTGCCCTGG ACCAGAACTG CCAGTGGGAG
2101 CCCCgGAATC AGGAGTGCAT TGCCCTGCCC GAAAATATCT GTGGCATTGG
2151 CTGGCATT TG GTTGAAACT CATGTTTGAA AATTACTACT GCCAAGGAGA
2201 ATTATGACAA TGCTAAATTG TTCTGTAGGA ACCACAATGC CCTTTTGCT
2251 TCTCTTACAA CCCAGAAGAA GGTAGAATTT GTCCTTAAGC AGCTGCGAAT
2301 AATGCAGTCA TCTCAGAGCA TGTCCAAGCT CACCTTAACC CCATGGGTGC
2351 GCCTTCGGAA GATCAATGTG TCCTACTGGT GCTGGGAAGA TATGTCCCCA
2401 TTTACAAATA GTTTACTACA GTGGATGCCG TCTGAGCCCA GTGATGCTGG
2451 ATTCTGTGGA ATTTTATCAG AACCCAGTAC TCGGGGACTG AAGGCTGCAA
2501 CCTGCATCAA CCCACTCAAT GGTAGTGTCT GTGAAAGGCC TGCAAACCAC
2551 AGTGCTAAGC AGTGCCGGAC ACCATGTGCC TTGAGGACAG CATGTGGAGA
2601 TTGCACCAGC GGCAGCTCTG AGTGCATGTG GTGCAGCAAC ATGAAGCAGT
2651 GTGTGGACTC CAATGCCTAT GTGGCCTCCT TCCCTTTTGG CCAGTGTATG

2701 GAATGGTATA CGATGAGCAC CTGCCCCCCT GAAAATTGTT CAGGCTACTG
2751 TACCTGTAGT CATTGCTTGG AGCAACCAGG CTGTGGCTGG TGTACTGATC
2801 CCAGCAATAC TGGCAAAGGG AAATGCATAG AGGGTTCCTA TAAAGGACCA
2851 GTGAAGATGC CTTCGCAAGC CCCTACAGGA AATTTCTATC CACAGCCCCCT
2901 GCTCAATTCC AGCATGTGTC TAGAGGACAG CAGATACAAC TGGTCTTTCA
2951 TTCACTGTCC AGCTTGCCAA TGCAACGGCC ACAGTAAATG CATCAATCAG
3001 AGCATCTGTG AGAAGTGTGA GAACCTGACC ACAGGCAAGC ACTGCGAGAC
3051 CTGCATATCT GGCTTCTACG GTGATCCAC CAATGGAGGG AAATGTCAGC
3101 CATGCAAGTG CAATGGGCAC GCGTCTCTGT GCAACACCAA CACGGGCAAG
3151 TGCTTCTGCA CCACCAAGGG CGTCAAGGGG GACGAGTGCC AGCTATGTGA
3201 GGTAGAAAAT CGATACCAAG GAAACCCTCT CAGAGGAACA TGTTATTATA
3251 CTCTTCTTAT TGA CTATCAG TTCACCTTTA GTCTATCCCA GGAAGATGAT
3301 CGCTATTACA CAGCTATCAA TTTTGTGGCT ACTCCTGACG AACAAAACAG
3351 GGATTGAC ATGTTTCATCA ATGCCTCCAA GAATTTCAAC CTCAACATCA
3401 CCTGGGCTGC CAGTTTCTCA GCTGGAACCC AGGCTGGAGA AGAGATGCCT
3451 GTTGTTTCAA AAACCAACAT TAAGGAGTAC AAAGATAGTT TCTCTAATGA
3501 GAAGTTTGAT TTTGCAACC ACCCAAATAT CACTTTCTTT GTTTATGTCA
3551 GTAATTTTAC CTGGCCCATC AAAATTCAGG TGCAAACCTGA ACAATGA

Fig. 8C

FIGURE 9

1 MVA AAAATEA RLRRRTAATA ALAGRS GGPH CVNGGRCNPG TGQCVC PAGW
51 VGEQCQHCGG RFRLTGSSGF VTDGPGNYKY KTKCTWLIEG QPNRIMRLRF
101 NHFATECSWD HLYVYDGDSI YAPLVAAAFSG LIVPERDGNE TVPEVVATSG
151 YALLHFFSDA AYNLTGFNIT YSFD MCPMNC SGRGECKISN SS DTVECECS
201 ENWKGEACDI PHCTDNC GFP HRGICNSSDV RGCSCFSDWQ GPGCSVPVPA
251 NQSFWTREEY SNLKLPRASH KAVVNGNIMW VVG GYMFNHS DYNMVLAYDL
301 ASREWLP LNR SVMNVVRYG HSLALYKDKI YMYGGKIDST GNV TNELRVF
351 HIHNESWVLL TPKAKEQYAV VG HSAHI VTL KNGRVVMLVI FGHCPLYGYI
401 SNVQEYDL DK NTWSILHTQG ALVQGGYGHS SVYDHRTRAL YVHGGYKA FS
451 ANKYRLADDL YRYD VDTQMW TILKDSRFFR YLHTAVIVSG TMLVFGGNTH
501 NDTSM SHGAK CFSSDFMAYD IACDRWSVLP RPD LHHDVNR FG HSAVLHNS
551 TMYVFGGFNS LLLSDILVFT SEQCD AHRSE AACLAAGPGI RCVWNTGSSQ
601 CISWALATDE QEEKLKSECF SKRTLDH DRC DQHTDCY SCT ANTNDCHWCN
651 DHCVPRNHSC SEGQISIFRY ENCPKDNPMY YCNKKTSCRS CALDQNCQWE
701 PRNQECIALP ENICGIGWHL VGNSCLXITT AKENYDNAKL FCRNHNALLA
751 SLTTQKKVEF VLKQLRIMQS SQSMSKLTLT PWVGLRKINV SYWCWEDMSP
801 FTNSLLQWMP SEPSDAGFCG ILSEPSTRGL KAATCINPLN GSV CERPANH
851 SAKQCRTPCA LRTACGDCTS GSSECMWCSN MKQCVDSNAY VASF PFGQCM
901 EWYTMSTCPP ENCSGYCTCS HCLEQPGCGW CTDPSNTGKG KCIEGSYKGP
951 VKMPSQAPTG NFYPQPLLNS SMCLEDSRYN WSFIHCPACQ CNGH SKCINQ
1001 SICEKCNLT TGKHCETCIS GFYGDPTNGG KCQPC KCNGH ASLCNTNTGK
1051 CFCTTKGVKG DECQLCEVEN RYQGNPLRGT CYYTLLIDYQ FTFSLSQEDD
1101 RYYTAINFVA TPDEQNRDL D MFINASKNFN LNITWAASFS AGTQAGEEMP
1151 VVSKTNIKEY KDSFSNEKFD FRNH PNITFF VVVS NFTWPI KIQIAFSQHS
1201 NFMDLVQFFV TFFSCFLSLL LVA AVVWKIK QSCWASRRRE QLLREM QOMA
1251 SRPFASVNVA LETDEEPPDL IGGSIKTVPK PIALEPCFGN KAAVLSVFVR
1301 LPRGLGGIPP PGQSG LAVAS ALVDISQOMP IVYKEKSGAV RNRKQOPPAQ
1351 PGTCI

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FIGURE 10A

1 atggtggccg cagcggcggc aactgaggca aggcctgagga ggaggacggc
51 ggcgacggca gcgctcgcg gcaggagcgg cggggccgcac tgtgtcaacg
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251 gcacgtggct cattgaagga cagccaaata gaataatgag acttcgtttc
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501 taatattact tacagttttg atatgtgtcc aaataactgc tcaggccgag
551 gagagtgtaa gatcagtaat agcagcgata ctgttgaatg tgaatgttct
601 gaaaactgga aaggtgaagc atgtgacatt cctcactgta cagacaactg
651 tggttttcct catcgaggca tctgcaattc aagtgaatgc agaggatgct
701 cctgcttctc agactggcag ggtcctggat gttcagttcc tgtaccagct
751 aaccagtcac tttggactcg agaggaatat tctaacttaa agctccccag
801 agcatctcat aaagctgtgg tcaatggaaa cattatgtgg gttgttggag
851 gatatatgtt caaccactca gattataaca tggttctagc gttatgacct
901 gcttctaggg agtggcttcc actaaaccgt tctgtgaaca atgtgttgt
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1001 gaggaaaaat tgattcaact gggaatgtga ccaatgagtt gagagtttt
1051 cacattcata atgagtcacg ggtgttgttg acccctaagg caaaggagca
1101 gtatgcagtg gttgggcact ctgcacacat tgttacactg aagaatggcc
1151 gagtggtcac gctgggtcatc tttgggtcact gccctctcta tggatatata
1201 agcaatgtgc aggaatatga tttggataag aacacatgga gtatattaca
1251 caccaggggt gcccttgtgc aaggggggta cggccatagc agtgtttacg
1301 accataggac cagggcccta tacgttcacg gtggctacaa ggctttcagt
1351 gccaaataagt accggcttgc agatgatctc taccgatatg atgtggatac
1401 ccagatgtgg accattctta aggacagccg atttttccgt tacttgaca
1451 cagctgtgat agtgagtgga accatgctgg tgtttggggg aaacacacac
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1551 ggcctatgac attgcctgtg accgctggctc agtgcctccc agacctgatc
1601 tccaccatga tgtcaacaga tttggccatt cagcagctct acacaacagc
1651 accatgtatg tgttcgggtg tttcaatagt ctccctctca gcgacatcct
1701 ggtattcacc tgggaacagt gtgatgcgca tggagtgaa gccgcttgtt
1751 tagcagcagg acctggtatt ggggtgtgtg ggaacacagg gtcgtctcag
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1951 gaccattgtg tccccaggaa ccacagctgc tcagaaggcc agatctccat
2001 ttttaggtat gagaattgcc ccaaggataa ccctatgtac tactgtaaca
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2501 cctgcatcaa cccactcaat ggtagtgtct gtgaaaggcc tgcaaaccac
2551 agtgctaagc agtgccggac accatgtgcc ttgaggacag catgtggaga
2601 ttgcaccagc ggcagctctg agtgcatgtg gtgcagcaac atgaagcagt

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FIGURE 10B

2651 gtgtggactc caatgcctat gtggcctcct tcccttttgg ccagtgtatg
2701 gaatggtata cgatgagcac ctgccccctt gaaaattgtt caggctactg
2751 tacctgtagt cattgcttgg agcaaccagg ctgtggctgg tgtactgatc
2801 ccagcaatac tggcaaaggg aaatgcatag agggttccta taaaggacca
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2951 ttcactgtcc agcttgccaa tgcaacggcc acagtaaattg catcaatcag
3001 agcatctgtg agaagtgtga gaacctgacc acaggcaagc actgcgagac
3051 ctgcatatct ggcttctacg gtgatccac caatggaggg aaatgtcagc
3101 catgcaagtg caatgggcac gcgtctctgt gcaacaccaa cacgggcaag
3151 tgcttctgca ccaccaaggg cgtcaagggg gacgagtgc agctatgtga
3201 ggtagaaaat cgataccaag gaaacctctt cagaggaaca tgttattata
3251 ctcttcttat tgactatcag ttcaccttta gtctatccca ggaagatgat
3301 cgctattaca cagctatcaa ttttgtggct actcctgacg acaaaaacag
3351 ggatttggac atgttcatca atgcctccaa gaatttcaac ctcaacatca
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3451 gttgtttcaa aaaccaacat taaggagtac aaagatagtt tctctaataga
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3551 gtaatttcac ctggcccatc aaaattcaga ttgccttctc tcagcacagc
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3751 agccgtccct ttgcctctgt aaatgtcgcc ttggaaacag atgaggagcc
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3851 tggagccgtg ttttggcaac aaagccgctg tcctctctgt gtttgtgagg
3901 ctccctcgag gcctgggtgg catccctcct cctgggcagt caggctctgc
3951 tgtggccagc gccctggtgg acatttctca gcagatgccg atagtgtaca
4001 aggagaagtc aggagccgtg agaaaccgga agcagcagcc ccctgcacag
4051 cctgggacct gcatctga

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FIGURE 11

MVAAAAATEARLRRRTAATAALAGRSSGPHWDWDVTRAGRPGLGAGLRPLPRLSPPLR
PRLLLLLLLLPPPLLLLLLPCEAEAAAAAAVSGSAAAEAKECDRPCVNGGRGNPGTG
QCVCAPAGWVGEQCQHCGGRFRLTGSSGFVTDGPGNYKYKTKCTWLIEGQPNRIMRLRF
NHFATECSWDHLYVTDGDSIYAPLVAAFSGLIVPERDGNETVPEVATSGYALLHFFS
DAAYNLGTGFNITYSFDMPNNCSGRGECKISNSSETVECECSENWKGEACDIPHCTDN
CGFPHRGICNSSDVRGSCSFSWQGPSCSVVPANQSFWTREEYSNLKLPRASHKAVV
NGNIMVWVGGYMFNHSYDYMVLAYDLASREWLPNRSVNNVVVRYGHSALALYDKIYM
YGGKIDPTGNVTNELRVFHIHNESWVLLTPKAKEQYAVVGHSAHIVTLKNGRVVMLVI
FGHCPLYGYISNVQEYDLDKNTWSILHTQALVQGGYGHSSVYDHRTRALYVHGKYKA
FSANKYRLADDLYRYDVTQMWTLKDSRFFRYLHTAVIVSGTMLVFGGNTHTDTSMS
HGAKCFSSDFMAYDIACDRWSVLPRPDLHHDVNRFGHSAVLHNSTMYVFGGFNSLLLS
DILVFTSEQDAHRSEAACLAAGPGIRCVWNTGSSQCISWALATDEQEEKLHSECFSK
RTLHDHRCDOHTDCYCTANTNDCHWCNDHCVPRNHSCSEGQISIFRYENCFFDNPMY
YCNKKTSCRSCALDQNCQWEPRNQECIALPENICGIGWHLVGNLCLKITTAKENYDNA
KLFCRNHNALLASLTQKKVEFVLKQLRIMQSSQSMKLTLPWVGLRKINVSYWCWE
DMSPFNSLLQWMPSEPSDAGFCGILSEPSTRGLKAATCINPLNGSVCPANHSAKO
CRTPCALRTACGDTSGSSECMWCSNMKQCVDNAYVASFFFGQCMEWYTMSTCPPEN
CSGYCTCSHCLEQPGCGWCTDPSNTGKGKCIEGSYKGPVKMPSQAPTGNFYQPPLNS
SMCLEDSRYNWSFIHCPACQCNGHSCINQSIKEKCNLTGKHCETCISGFYGDPTN
GGKCQPCCKNGHASLCNTNTGKCFCTTKGVKGDECQLCEVENRYQGNPLRGTCYITLL
IDYQFTFSLSQEDDRYYTAINFVATPDEQNRDLDMFINASKNFNLNITWAASFAGTQ
AGEEMPVVSKTNIKEYKDSFSNEKFDFRNHPNITFFVYVSNFTWPIKIQVQTEQ

T 0 9 7 8 7 0 9 7

FIGURE 12

1 atggtggtggc cagcggcgcc aactgagga aggctgagga ggaggacggc ggcgacggca
61 gcgctcgccg gcaggagcgg cgggcccgcac tgggactggg acgtgaccag ggcgggagg
121 cgggggctgg gggccgggct gcgcctcccg cggctgctgt cccaccgct gcggccacgg
181 ctgctgctgc tgcgtgtgtt gctcccggcg ccgctgttgc tgcgtgtgct ggcctgtgag
241 gccgaggccg cggcggcgcc ggccggcggtg tccggctcag ccgcagccga ggccaaggaa
301 tgtgaccggc cctgtgtcaa cggcggtcgc tgcaaccctg gcaccggcca gtgcgtctgc
361 cccgccggct ggggtggcga gcaatgccag cactgcgggg gccgcttcag actaactgga
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661 gccacatcag gttatgcctt gctgcatttt tttagtgtg ctgcttataa tttgactgga
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901 tcaagtgtatg tcagaggatg ctcctgcttc tcagactggc agggctcctg atgttcagtt
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1261 ttgagagttt ttacattca taatgagtca tgggtgttgt tgacccctaa ggcaaaggag
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1381 atgctggtca tctttggtca ctgccccttc tatggatata taagcaatgt gcaggaatat
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1561 aaggctttca gtgccaataa gtaccggctt gcagatgatc tctaccgata cacagctgtg
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2281 agctgcagga gctgtgcccc ggaccagaac tgcagtgagg agccccgaa tcaggagtgc
2341 attgccctgc cgtgtggcatt ctgtggcatt ggctggcatt tgggtggaaa ctcatgtttg
2401 aaaattacta ctgccaagga gaattatgac aatgctaaat tgttctgtag gaaccacaat
2461 gcccttttgg cttctcttac aaccagaag aaggtagaat ttgtccttaa gcagctgcga
2521 ataatgcagt catctcagag catgtccaa gctacettta cccatgggtt cggccttcgg
2581 aagatcaatg tgcctactg gtgctgggaa gatattgtccc cttttacaaa tagtttacta
2641 cagtggatgc cgtctgagcc cagtgtgct ggattctgtg gaattttatc agaaccagtc
2701 actcggggac tgaaggctgc aacctgcac aacccactca atggtagtgt ctgtgaaagg
2761 cctgcaaac acagtgtcaa gcagtgcgg acaccatgtg ccttgaggac agcatgtgga
2821 gattgcacca gcggcagctc tgagtgcagc tgggtgcagca acatgaagca gtgtgtggac
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3301 accaatggag ggaatgtcga gccatgcaag tgcataaggc acgcgtctct gtgcaacacc
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3721 gagaagtgtg attttcgcaa ccacccaaat atcactttct ttgtttatgt cagtaatttc
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T 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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101	CDRPCVNGGR	CNPGTGQCVC	PAGWVGEQCQ	HCGGRFRLTG	SSGFVTDGPG
151	NYKYKTKCTW	LIEQPNRIM	RLRFNHFATE	CSWDHLYVYD	GDSIYAPLVA
201	AFSGLIVPER	DGNETVPEVV	ATSGYALLHF	FSDAAYNLTG	FNITYSFDMC
251	PNNCSGRGEC	KISNSSETVE	CECSENWKGE	ACDIPHCTDN	CGFPHRGICN
301	SSDVRGCSCF	SDWQGP GCSV	PVPANQSFWT	REEYSNLKLP	RASHKAVVNG
351	NIMWVGGYIM	FNHSDYNMVL	AYDLASREW	FLNRSVMNVV	VRYGHSLALY
401	KDKIYMYGGK	IDPTGNVTNE	LRVFHINHES	WVLLTPKAKE	QYAVVGHSAH
451	IVTLKNGRVV	MLVIFGHCP	YGYISNVQY	DLDKNTWSIL	HTQAGLVGGG
501	YGHSSVYDHR	TRALYVHG	KAFSANKYRL	ADDLYRYD	VTDV
551	RFFRYLHTAV	IVSGTMLVFG	GNTHNDTSM	HGAKCFSSDF	MAYDIACDRW
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651	HRSEAACLAA	GPGIRCVWNT	GSSQCISWAL	ATDEQEEKLK	SECFSKRTLD
701	HDRCDQHTDC	YSCTANTNDC	HWCNDHCVPR	NHSCSEGQIS	IFRYENC PKD
751	NPMYYCNKKT	SCRSCALDQN	CQWEPRNQEC	IALPENICGI	GWHLVGN SCL
801	KITTAKENYD	NAKLFCRNHN	ALLASLTQK	KVEFVLKQLR	IMQSSQSMSK
851	LTLTPWVGLR	KINVSYWCWE	DMSPFTNSLL	QWMPSEPSDA	GFCGILSEPS
901	TRGLKAATCI	NPLNGSV CER	PANHSAKQCR	TPCALRTACG	DCTSGSSECM
951	WCSNMKQCVD	SNAYVASFPF	GQCMEWYTMS	TCPPENC SGY	CTCSHCLEQP
1001	GCGWCTDPSN	TGKGKCI EGS	YKGPVKMPSQ	APTGNFYPPQ	LLNSMCL ED
1051	SRYNWSFIHC	PACQCNGH SK	CINQSCICEK	ENLTTGKHCE	TCISGFY G DP
1101	TNGGKCQPC K	CNGHASLCNT	NTGKCFCTTK	GVKGDEQCLC	EVENRYQGNP
1151	LRGTCCYYTLL	IDYQFTFSL S	QEDDRYYTAI	NFVATPDEQN	RDLDMFINAS
1201	KNFNLNITWA	ASFAGTQAG	EEMPVVSKTN	IKEYKDSFSN	EKFDFRNHPN
1251	ITFFVYVS NF	TWPIKIQIAF	SQHSNFMDLV	QFFVTF FSCF	LSLLLVA AVV
1301	WKIKQSCWAS	RRREQLLREM	QQMASRPFAS	VNVALETDEE	PPDLIGGS IK
1351	TVPKPIALEP	CFGNKA AVLS	VFVRLPRGLG	GIPPPGQ SGL	AVASALVDIS
1401	QQMPIVYKEK	SGAVRN RKQQ	PPAQPGTCI		

FIGURE 14A

1	atggtggccg	cagcggcgcc	aactgaggca	aggctgagga	ggaggacggc
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151	cggctgctgt	ctccaccgct	gcggccacgg	ctgctgctgc	tgctgttgtt
201	gctcccgcgg	ccgctgttgc	tgctgctgct	gccctgtgag	gccgaggccg
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351	gtgctgtctg	ccgcggcgct	gggtgggcca	gcaatgccag	cactgccccg
401	gccgcttcag	actaaactgga	tcttctgggt	ttgtgacaga	tggacctgga
451	aattataaat	acaaaacgaa	gtgcacgtgg	ctcattgaag	gacagccaaa
501	tagaataatg	agacttcgtt	tcaatcattt	tgctacagag	tgtagtggg
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701	ctgcttataa	tttgactgga	tttaataatta	cttacagtgt	tgatatgtgt
751	ccaaataaact	gctcaggccg	aggagagtgt	aagatcagta	atagcagcga
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851	ttcctcactg	tacagacaac	tgtgggtttc	ctcatcgagg	catctgcaat
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1201	aaggataaaa	tttacatgta	tggaggaaaa	attgatccaa	ctgggaatgt
1251	gaccaatgag	ttgagagttt	ttcacattca	taatgagtca	tgggtgttgt
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2001	gtggaacaca	gggtcgtctc	agtgtatctc	gtgggcgctg	gcaactgatg
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2501	ttgtccttaa	gcagctgcga	ataatgcagt	catctcagag	catgtccaag
2551	ctcaccttaa	ccccatgggt	cggccttcgg	aagatcaatg	tgtcctactg
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Figure 14B

2651	cgtctgagcc	cagtgatgct	ggattctgtg	gaattttatc	agaacccagt
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2751	ctgtgaaagg	cctgcaaacc	acagtgctaa	gcagtgccgg	acaccatgtg
2801	ccttgaggac	agcatgtgga	gattgcacca	gcggcagctc	tgagtgcattg
2851	tgggtgcagca	acatgaagca	gtgtgtggac	tccaatgcct	atgtggcctc
2901	cttccctttt	ggccagtgtg	tggaaatggta	tacgatgagc	acctgcccc
2951	ctgaaaattg	ttcaggctac	tgtacctgta	gtcattgctt	ggagcaacca
3001	ggctgtggct	ggtgtactga	tcccagcaat	actgsgaaa	ggaaatgcat
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4251	gaagcagcag	ccccctgcac	agcctgggac	ctgcatctga	

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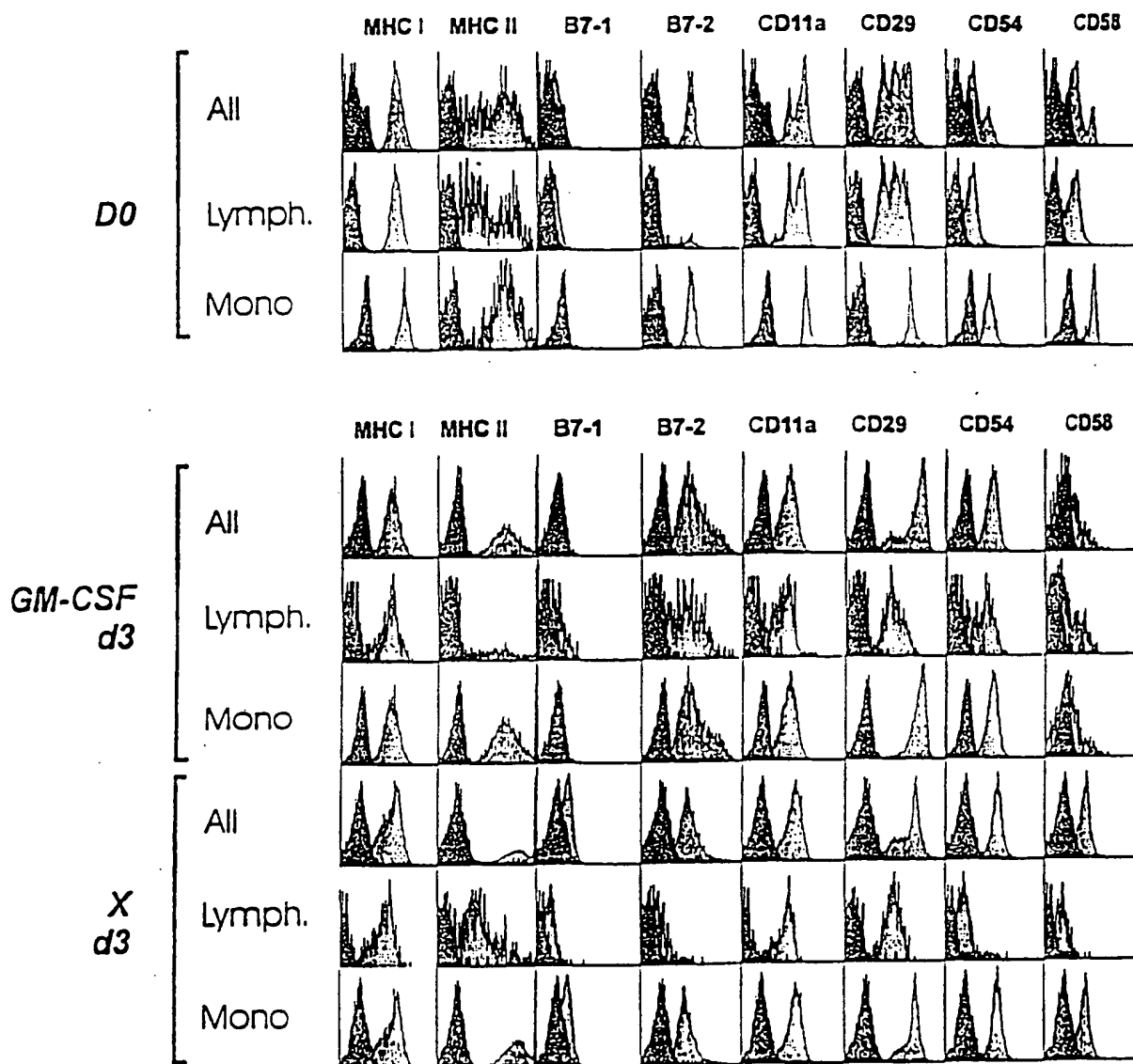


Fig. 15